

**THE OFFICE OF REGULATORY STAFF
DIRECT TESTIMONY AND EXHIBITS
OF
JEFFREY P. DEBESSONET, P.E.**

MAY 22, 2013



DOCKET NO. 2012-383-WS

**Application of Carolina Water Service,
Incorporated for Approval of a Bulk Sewer
Service Agreement between Carolina Water
Service, Incorporated and Utilities,
Incorporated and Georgetown County Water
and Sewer District**

DIRECT TESTIMONY OF JEFFREY P. DEBESSONET, P.E.

FOR

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2012-383-WS

IN RE: APPLICATION OF CAROLINA WATER SERVICE, INCORPORATED

FOR APPROVAL OF A BULK SEWER SERVICE AGREEMENT BETWEEN

CAROLINA WATER SERVICE, INCORPORATED AND UTILITIES,

INCORPORATED AND GEORGETOWN COUNTY WATER AND SEWER

DISTRICT

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND
OCCUPATION.**

A. My name is Jeffrey P. deBessonnet and my business address is 2600 Bull Street, Columbia, South Carolina 29201. I am employed by the South Carolina Department of Health and Environmental Control ("DHEC") as the Director of Water Facilities Permitting.

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND
EXPERIENCE.**

A. I received a Bachelor of Science Degree in Engineering from Louisiana State University. I am a licensed Professional Engineer registered in the State of South Carolina. After graduating from Louisiana State University, I was employed by DHEC as an Environmental Engineer Associate. Later, I was promoted to the position of Director of Water Facilities Permitting where I am

1 responsible for issuance of National Pollutant Discharge Elimination System
2 (NPDES) wastewater permits in accordance with state and federal laws, among
3 other things.

4 **Q. HOW LONG HAVE YOU PROVIDED REGULATORY OVERSIGHT**
5 **AND ENGINEERING SERVICES TO WATER AND WASTEWATER**
6 **FACILITIES?**

7 A. I have over twenty-eight years of regulatory compliance experience
8 providing assistance and regulatory oversight for water and wastewater facilities
9 and services.

10 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
11 **PROCEEDING?**

12 A. The purpose of my testimony is to set forth DHEC's interest in the bulk
13 sewer service agreement approval request by Carolina Water Service, Inc.
14 ("CWS") for its sewer system in Georgetown County. Specifically, I will focus
15 on CWS's compliance with DHEC's rules and regulations, and DHEC's consent
16 order with CWS.

17 **Q. ARE THE FINDINGS OF YOUR REVIEW CONTAINED IN THIS**
18 **TESTIMONY AND ACCOMPANYING EXHIBITS?**

19 A. Yes, my testimony and the attached exhibits detail DHEC's involvement
20 with the CWS Whites Creek/Lincolnshire sewer system and our concerns.

21 **Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPLIANCE HISTORY**
22 **FOR CWS'S WHITES CREEK/LINCOLNSHIRE SEWER SYSTEM.**

1 A. CWS operates a wastewater collection and treatment system in
2 Georgetown. Treated wastewater is currently being discharged to Whites Creek,
3 a tributary to the Sampit River.

4 The CWS Whites Creek/Lincolnshire system has been cited for numerous
5 violations over the past twenty years. While the cause for some of the non-
6 compliance issues were not specifically identified by CWS, many of the problems
7 have been attributed to significant inflow/infiltration (“I/I”) in the collection
8 system during wet weather events and when the groundwater table is high.

9 CWS entered into a Consent Order with DHEC for its wastewater
10 operations in Georgetown County on April 10, 2012. Consent Order 12-012-W
11 detailed violations of the Pollution Control Act, S.C. Code Ann § 48-1-10 to -350,
12 and National Pollutant Discharge Elimination System (“NPDES”) Permits
13 SC0030732. See Exhibit JPD – 1. CWS failed to comply with the effluent limits
14 for biochemical oxygen demand (BOD), total residual chlorine (TRC), total
15 copper and total lead contained in its NPDES permit. Among other things, the
16 Consent Order requires CWS to 1.) Transfer ownership of the Whites
17 Creek/Lincolnshire system to Georgetown County Water and Sewer District, 2.)
18 Construct an interconnection between Georgetown County Water and Sewer
19 District and CWS Whites Creek/Lincolnshire system, or 3.) Upgrade the existing
20 facility to meet Final Permit limits. DHEC continues to monitor progress of
21 compliance with the order and may take further action as needed.

1 **Q. DOES DHEC HAVE AN OPINION ABOUT THE IMPACT TO THE CWS**
2 **CUSTOMER’S MONTHLY SEWER BILL IF THIS INTERCONNECTION**
3 **AGREEMENT IS APPROVED?**

4 DHEC does not have authority over the sewer rates charged to customers
5 of a private investor-owned utility such as CWS. Therefore, we do not have an
6 opinion regarding the projected rates as presented by CWS in its application or
7 those outlined by the Office of Regulatory Staff (“ORS”) in its testimony.

8 **Q. DESCRIBE THE FLOW DATA SUBMITTED TO DHEC BY CWS OVER**
9 **THE PAST THIRTY-SIX MONTHS.**

10 A. CWS has provided DHEC with routine data that identifies the discharge
11 flow for the CWS Whites Creek/Lincolnshire system on a regular basis as
12 required by its permit. Since 2010, the weekly average discharge flow has ranged
13 from approximately 61,000 gallons/day (“gpd”) to 316,000 gpd – into a plant
14 permitted for 125,000 gpd. Since 2010, the monthly average flows have ranged
15 from approximately 59,000 gpd to 206,000 gpd. See Exhibit JPD-2. Peak flows
16 induced from rainfall have been cited as a problem by CWS.

17 **Q. HOW CAN CWS REDUCE INFLOW/INFILTRATION INTO THE**
18 **WHITE’S CREEK WASTEWATER SYSTEM?**

19 A. The solution is to make repairs to the White Creek/Lincolnshire
20 wastewater collection system. In general, the work should include a thorough
21 investigation of the sewer mains and laterals from the sewer mains to determine
22 the specific source(s) of the I/I and the degree of repairs needed. This
23 investigation should include the customer laterals. However, at this time, DHEC

1 does not have enough information to conclude that any one specific source is a
2 major contributor to the I/I problem or where in the collection system CWS
3 should focus its effort.

4 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

5 A. Yes it does.

BOARD:
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Promoting and protecting the health of the public and the environment

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April 12, 2012

CERTIFIED MAIL 91 7108 2133 3938 7369 1752

Mr. Patrick Flynn, Reg. Director
Carolina Water Service, Inc.
200 Weathersfield Avenue
Altamonte Springs, FL 32714-4027

Re: Consent Order 12-012-W
Whites Creek-Lincolnshire Wastewater Treatment Plant
NPDES Permit SC0030732
Georgetown County

Dear Mr. Flynn:

Enclosed, please find a copy of the fully executed Consent Order 12-012-W affecting the above referenced facility. **The Order is considered executed on April 10, 2012.**

Please be aware of the scheduled compliance requirements outlined on pages six (6) and seven (7) of the Order. Please call me at (803) 898-4181 if you have questions or need additional information.

Sincerely,

Paul F. Wise
Water Pollution Enforcement Section
Bureau of Water

Enclosure

cc: via electronic mail
Larry Ragsdale, Region 6
Eddie Bassett, WP Enforcement/Compliance

**THE STATE OF SOUTH CAROLINA
BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**

**IN RE: CAROLINA WATER SERVICE, INC.
WHITES CREEK – LINCOLNSHIRE WASTEWATER TREATMENT PLANT
GEORGETOWN COUNTY**

**CONSENT ORDER
12-012-W**

Carolina Water Service, Inc. (Respondent) owns and is responsible for the proper operation and maintenance of the Whites Creek-Lincolnshire wastewater treatment plant (WWTP) located off U.S. Highway 17 on Pee Dee Road, in Georgetown County, South Carolina.

The Respondent failed to comply with the effluent limits for biochemical oxygen demand (BOD), total residual chlorine (TRC), total copper and total lead contained in its National Pollutant Discharge Elimination System (NPDES) Permit.

Based upon discussions with agents for the Respondent on February 10, 2012, the parties have agreed to the issuance of this Order to include the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

1. The Respondent owns and is responsible for the proper operation and maintenance of the Whites Creek-Lincolnshire WWTP located in Georgetown County, South Carolina.
2. The South Carolina Department of Health and Environmental Control (Department) reissued NPDES Permit SC0030732 to the Respondent, authorizing the discharge of treated wastewater to Whites Creek to the Sampit River, in accordance with the effluent limitations, monitoring requirements, and other conditions set forth therein.
3. On January 17, 2008, Department staff issued Construction Permit # 34,747-WW, authorizing

- the Respondent to upgrade the existing WWTP to meet NPDES Permit limits, to include conversion to sequencing batch reactor treatment units and ultraviolet (UV) disinfection equipment. The permit expired January 16, 2011.
4. The Respondent reported violations of the effluent limits of the NPDES Permit during the following monitoring periods:
- Biochemical Oxygen Demand (BOD) – May 2010, June 2010
- Total Residual Chlorine (TRC) – January 2010 through December 2010, inclusive.
- Comments provided on the DMRs stated the TRC violations were due to the absence of dechlorination equipment. [The] New plant (SC DHEC Construction Permit # 34-747-WW) will have UV disinfection.
5. On November 22, 2010, Department staff sent a notice of violation (NOV) to the Respondent, via certified mail, regarding the BOD violations reported for the May and June 2010 monitoring periods and the TRC violations reported for the May through November 2010 monitoring periods. A response was requested within ten (10) days of receipt of the notice, with the measures to be taken to ensure compliance with Permit conditions.
6. In a letter dated December 14, 2010, received December 17, 2010, the Respondent stated the BOD violations were associated with spikes in plant flow attributable to collection system deficiencies. The collection system has significant inflow/infiltration (I&I) during wet weather events and when the groundwater table is high. The Utility has cleaned and video inspected the majority of the White Creek portion of the collection system in order to determine the location and severity of piping deficiencies. The Utility had committed to approximately fifty-five thousand dollars (\$55,000.00) in capital improvements to repair three hundred fifty (350)

linear feet of gravity sewer main and associated sewer taps. The work was scheduled to be complete by December 2010.

The letter further stated the TRC exceedances were attributable to the absence of any dechlorination facilities at the WWTP. The Utility proposed to install a dechlorination tab feeder to meet permit limits. A request to modify the permit and to construct the dechlorination feeder would be forwarded to the Department for approval within thirty (30) days. Actual construction time would be less than thirty (30) days.

7. The Respondent reported violations of the effluent limits of the NPDES Permit for the following monitoring periods:

BOD – February 2011 through July 2011, inclusive.

Comments provided on the February DMR stated the BOD exceedance was due to a 3-inch rainfall event the first week of February. Comments provided on the March DMR stated the BOD exceedance was due to the plant being “slightly upset” due to repairs being made to the clarifier weir the day before sampling. Comments provided on the April DMR stated the BOD exceedance was due to the air diffusers in the aeration basin being clogged causing upset in the biological process. Comments provided on the May and June DMRs stated the BOD exceedances were due to no digester for process control.

8. The Respondent reported violations of the effluent limits of the NPDES Permit for the following monitoring periods:

Total Copper – March-May 2011, June-August 2011, and September-November 2011 quarterly monitoring periods.

Total Lead – March-May 2011, June-August 2011 quarterly monitoring periods

Comments provided on the DMRs stated the cause of the violations was unknown.

9. The Respondent reported violations of the effluent limits of the NPDES Permit for the following monitoring periods: TRC - January 2011 through December 2011, inclusive.

Comments provided on the DMRs stated the TRC violations were due to the absence of dechlorination equipment. [The] [n]ew plant (SC DHEC Construction Permit # 34-747-WW) will have UV disinfection.

10. On August 1, 2011, Department staff conducted a Compliance Evaluation Inspection (CEI) of the WWTP. The facility received an Unsatisfactory rating due to continued non-compliance with TRC limits, the unauthorized discharge of sludge to the receiving stream and the excessive I&I in the collection system. During the inspection it was noted that some of the equipment to be used for the upgrade of the WWTP under Construction Permit 34-747-WW was onsite, but not installed.
11. On August 17, 2011, Department staff sent an NOV to the Respondent, via certified mail, regarding the BOD, TSS, total copper and total lead effluent violations reported for the June 2011 monitoring period. A response was not requested since an explanation of the violations had been provided on the DMRs.
12. In a letter dated September 8, 2011, Department staff notified the Respondent of the results of the August 1, 2011 CEI. The Respondent was requested to respond within fifteen (15) days of receipt of the letter, with corrective actions to address the deficiencies noted in the inspection.
13. On October 13, 2011, a meeting was held at the request of the Respondent, with Mr. Patrick Flynn, agent for the Respondent, to discuss the Whites Creek-Lincolnshire WWTP. Mr. Flynn indicated an agreement was being negotiated to transfer the WWTP and associated collection

system to Georgetown County Water and Sewer District (GC). Depending upon the success of the negotiations, Mr. Flynn proposed to eliminate the WWTP discharge to Whites Creek by connection to the GC system, or upgrade the facility to meet the NPDES permit limits.

14. In a letter to the Department dated October 21, 2011, the Respondent proposed a schedule addressing elimination of the WWTP discharge (by transferring the system to GC), or upgrading the facility to meet NPDES Permit limits. The proposed schedule included the submittal of construction permit application by February 28, 2012, for an interim upgrade to the WWTF to meet TRC limits until the facility is eliminated or upgraded to meet final NPDES Permit Limits.
15. On January 19, 2012, Department conducted an enforcement conference with agents for the Respondent to discuss the above finding of fact. The issuance of a Consent Order addressing the elimination of the WWTP discharge or upgrading the facility to meet final limits was discussed.
16. The Respondent reported violations of the TRC limits on DMRs submitted for the January 2012 monitoring periods.
17. As of March 1, 2012, the Respondent has not reached an agreement with GC for the elimination of the WWTF discharge.
18. As of March 1, 2012, the Respondent has not submitted the construction permit application for the interim upgrade to meet NPDES Permits for TRC.

CONCLUSIONS OF LAW

Based upon the above Findings of Fact, the Department reaches the following Conclusions of

Law:

1. The Respondent violated the Pollution Control Act, S.C. Code Ann. § 48-1-110 (d) (2008) and Water Pollution Control Permits, 24 S.C. Code Ann. Regs. 61-9.122.41 (a) and (e) (Supp. 2009 and Supp. 2010), in that it failed to comply with the BOD, TRC, total copper and total lead limits in its NPDES Permit.
2. The Pollution Control Act, S.C. Code Ann. § 48-1-330 (2008), provides for a civil penalty not to exceed ten thousand dollars (\$10,000.00) per day of violation for any person violating the Act or any rule, regulation, permit, permit condition, final determination, or Order of the Department.

NOW, THEREFORE, IT IS ORDERED, CONSENTED TO AND AGREED, pursuant to the Pollution Control Act, S.C. Code Ann. § 48-1-50 (2008) and § 48-1-100 (2008), that the Respondent shall:

1. Within thirty (30) days of the execution date of this Order submit a construction permit application and plans and specifications addressing an upgrade of the WWTF to meet NPDES Permit limits for TRC. This interim upgrade would provide disinfection and dechlorination treatment to meet NPDES Permit limits until the WWTF discharge is eliminated or the facility is upgraded to meet final limits.
2. Within ninety (90) days of the issuance of the construction permit, complete construction of the interim facility upgrade and obtain Department approval to operate the WWTP.
3. On or before April 30, 2012, negotiate an agreement with GC to eliminate the WWTP and submit a proposed schedule for elimination of the discharge. Upon approval, the schedule shall become an enforceable part of this Order.
4. If the negotiations with GC fail, then on or before May 30, 2012, submit a construction permit

application for the upgrade of the facility to meet all Final Permit limits.

5. Within thirty days of the issuance of the construction permit, commence construction of the upgrade to meet all Final Permit Limits.
6. Within one hundred fifty (150) days of the issuance of the construction permit, complete construction.
7. Within one hundred eighty (180) days of the issuance the construction permit, obtain approval to operate the upgraded facility.
8. Within thirty (30) days of the execution date of this Order, pay the Department a civil penalty in the amount of sixteen thousand dollars (\$16,000.00).

IT IS FURTHER ORDERED AND AGREED that the Department has assessed a civil penalty in the amount of twenty-six thousand dollars (\$26,000.00). The Department suspends ten thousand dollars (\$10,000.00) of the penalty, provided however, that this suspension shall be vacated and the full amount of twenty-six thousand dollars (\$26,000.00) shall be due and payable upon the Department's determination that the Respondent has failed to comply with the requirements of the Order. The penalty shall be due and payable within thirty (30) days of the date that the Respondent receives written notification of such determination from the Department. The Department's determination that the Respondent has not complied with the requirements of this Order shall be final. Further, a violation of the terms of this Order shall be deemed a violation of the South Carolina Pollution Control Act and shall be deemed unlawful, and may subject the Respondent to further enforcement action.

THE PARTIES FURTHER STIPULATE that the Respondent shall pay additional civil penalties in the amount of five thousand dollars (\$5,000.00) if the Respondent fails to meet a schedule date plus

five thousand dollars (\$5,000.00) per month for each and every additional month the Respondent fails to meet that schedule date, unless the schedule date has been extended by mutual agreement through further amendment to this Consent Order.

All penalties due under this paragraph shall be made payable to the South Carolina Department of Health and Environmental Control.

All penalties, including those due and payable in the event of the Respondent's failure to comply with this Order, shall be in addition to any other remedies or sanctions which may be available to the Department by reason of the Respondent's failure to comply with the requirements of this Order.

All penalties due under this paragraph shall be made payable to the South Carolina Department of Health and Environmental Control.

PURSUANT TO THIS ORDER, all communication regarding this Order and its requirements, shall include the Order number and shall be addressed as follows:

Paul F. Wise
Water Pollution Control Division
South Carolina DHEC
2600 Bull Street
Columbia, South Carolina 29201

Please include the Order number listed above on all submittals required under this Order, including all checks remitted as payment of the civil penalty.

IT IS FURTHER ORDERED AND AGREED that failure to comply with any provision of this Order shall be grounds for further enforcement action pursuant to the Pollution Control Act, S.C. Code Ann. § 48-1-330 (2008), to include the assessment of additional civil penalties.

IT IS FURTHER ORDERED AND AGREED that this Consent Order governs only Carolina Water Service, Inc.'s liability to the Department for civil sanctions arising from the matters set forth herein

and constitutes the entire agreement between the Department and Carolina Water Service, Inc., with respect to the resolution and settlement of the matters set forth herein. The parties are not relying upon any representations, promises, understandings or agreements except as expressly set forth within this Consent Order.

[Signature Page Follows]

**FOR THE SOUTH CAROLINA DEPARTMENT
OF HEALTH AND ENVIRONMENTAL CONTROL**

for James H. King, Jr.

Robert W. King, Jr., P.E.,
Deputy Commissioner
Environmental Quality Control

Date: 4/10/12

David E. Wilson, Jr.

David E. Wilson, Jr., P.E.,
Bureau Chief
Bureau of Water

Date: 4-5-12

Glenn E. Trofater

Glenn E. Trofater, Director
Water Pollution Control Division
Bureau of Water

Date: Apr. 5 2012

Reviewed By:

Robert Hall

Attorney
Office of General Counsel

Date: 4/5/12

WE CONSENT:

CAROLINA WATER SERVICE, INC.

Patrick Flynn

Patrick Flynn, Regional Director

Date: 4/3/12

CAROLINA WATER SERVICE INC SC0030732
Monthly & Weekly Average Flows

